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STUDY ON IDEOLOGICAL AND POLITICAL EDUCATION IN MODERN SEPARATION TECHNOLOGY UNDER THE COVID-19 EPIDEMIC SITUATION

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ABSTRACT

Ideological and political education is an important measure of the reform and innovation of the ideological and political courses in colleges and universities, which has gradually become the direction of the course reform because of its advantage of unity of moral and intellectual education. This study explored the new method of ideological and political education in modern separation technology under the COVID-19 epidemic situation. The research subjects included teaching mode, teaching design, teaching effect, teaching rethink profoundly. On the basis of traditional teaching mode, the ideological and political education materials were organically integrated into learning before class, in class and after class. At the end of the course, we conducted a survey about themes of patriotism, self-confidence, scientific literacy and mutual learning among civilizations to assess students' understanding of the ideological and political elements. It indicated that the ideological and political education mode was better than traditional teaching methods under the COVID-19 epidemic situation. The ideological and political education mode was more effective in cultivating people with moral character while improving professional quality of medical students. Our study can provide a reference of ideological and political education for other engineering programs, and promote the comprehensive advancement of ideological and political education in engineering courses.

KEYWORDS: COVID-19 epidemic situation, modern separation technology, ideological and political education.

INTRODUCTION:

The unexpected outbreak of epidemic diseases in early 2020 makes the Spring Festival of China extraordinary. According to the requirements of the notice of the education Ministry and the Provincial Department of education on the "stop classes and without stop learning"[1], the school has made a careful arrangement and deployment for the teaching work during the period of delaying opening the school. The teachers are asked to make full use of modern information technology to carry out online teaching and learning, so as to realize the goal of "delaying the start of school without stopping classes, and ensuring the quality of distance teaching". However, as college teachers, we not only need to transmit wisdown impart knowledge " in "teaching" and " solve doubts ", more importantly, we should share our ideals and beliefs by means of teaching, combine the classroom with curriculum ideological and political education, and combine moral education with intellectual education, and truly achieve " Learned Atsushi, Matilda truth, honesty and integrity surprisingly ".

The epidemic diseases has changed the traditional teaching method, online teaching is carried like a raging wildfire. As a university teacher, during the epidemic period, it is the duty to combine online professional teaching with ideological and political courses, impart professional knowledge, spread positive social energy, stimulate college students' professional cognition, enhance their cultural self-confidence, cultivate their patriotic feelings and stimulate their social responsibilities!

Prevention and control is the best classroom and the best textbook. Since the outbreak of the epidemic, the "most beautiful and rebellious" who have been ordered to go out to rescue the people in Hubei Province of China. The white angels offer selflessly and interpret the benevolence of doctors with their actions. The Communist Party members who dare to be the first to battle forward; the scientific research team competes against time to tackle the key problems; many workers persist in their posts and are contributing silently; countless enterprises and individuals give generously and donate money….. The speed and strength of China in the race against the epidemic and the virus fully demonstrate the advantages of the socialist system with Chinese characteristics and the self-confidence of upholding the leadership of the party. The great practice of the party leading the people to fight against the epidemic situation is a vivid teaching material of patriotism education.

1. TEACHING MODE ONLINE:

The mixed teaching mode of online and offline, the teaching platform "rain class + Tencent conference + MOOC" were used to carry out open, interactive and discussion teaching mode.



Figure 1: Teaching modes

2. TEACHING DESIGN:

2.1 Key points and difficulty point:

The modern separation technology course focuses on students' mastering the basic theory and basic skills of separation technology, understanding the latest development of separation engineering at home and abroad, cultivating students' ability to identify, analyze and solve problems, broaden their horizons and promote innovative thinking. The teaching emphasizes the application of engineering viewpoint, engineering method and innovative thinking to process analysis, pays attention to the combination of theoretical knowledge and production practice, and highlights the comprehensiveness and practicality of process development. At the same time, taking advantage of the special period and special epidemic situation, combining with the course content, we should guide the young students to cultivate their morality, build a correct world outlook, philosophy outlook on life and values, cultivate their perseverance, calm, patriotism and love the people's spirit, take the initiative to shoulder the historical mission and the responsibility, which turned this sudden disaster into precious spiritual resources for national rejuvenation.

2.2 Teaching design:

Some good case analysis were design earnestly, the focus of "ideological and political education" course shone were accurately found and described, which make "ideological and political education" infiltrate the whole process of curriculum teaching. Integration of ideological and political elements in teaching lessons.

In this course, the combinations of "rain class + Tencent conference + MOOC" were fully utilized to carry out the teaching design before class, in class and after class. According to the characteristics of engineering, various engineering and development practice cases are used for teaching. Through case analysis, students' understanding and consolidation of the course knowledge are deepened and strengthened, and the theoretical knowledge and production practice are more closely combined. On the basis of the overall teaching design, this course further designs the preview course, classroom teaching and after-school homework, taking the extracted case teaching,"Traditional Chinese Herb-artemisinin

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extraction and separation of Tu youyou" and Zhong Nanshan guided the fight against the epidemic as an example[2-4]. The designed contents see Table 1.

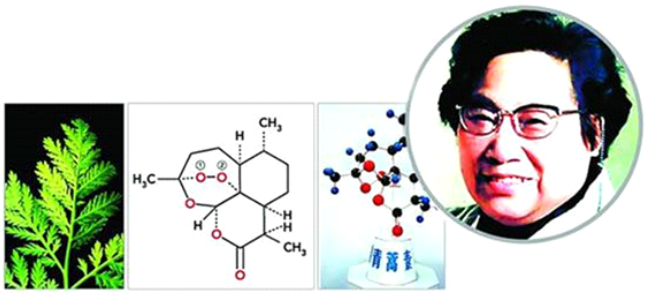


Figure 2: Artemisinin extraction and separation of Tu youyou as a case example

Table 1: Part of the ideological and political education contents in modern separation technology under the COVID-19 epidemic situation

Objectives of ideological and political education	Study materials of ideological and political education	Chapters of modern separation technology	Theoretical knowledge
Cultivate patriotism	For the sake of the safety of people, Zhong Nanshan resolutely went to Wuhan to guide the fight against the epidemic	Ideological and political education of anti-epidemic	Zhong Nanshan resolutely went to Wuhan to guide the fight against the epidemic
Strengthen the self-confidence of TCM	The successful development of artemisinin which is a gift of TCM to the people of the world comes from the wisdom of TCM	Extraction technology	The successful extraction and separation of artemisinin
[?] Hard work, persistent efforts and indomitable unswerving spirit	Tu Youyou successfully extracted artemisinin after 191 experiments, it was a long and arduous process. What trial and tribulations do these processes suffer?	Extraction technology	a long and difficult process of extraction and separation of artemisinin
Improve scientific literacy	Zhong Nanshan insisted on the truth and put forward the definite conclusion that COVID-19 can be transmitted from person to person	Overview of Extraction	Zhong Nanshan resolutely went to Wuhan to guide the fight against the epidemic
Strengthen mutual learning among civilizations	China shares experience in fighting COVID-19 with countries around the world and actively implements the concept of human destiny community	Ideological and political education of anti-epidemic	Important experience of TCM in fighting the epidemic situation of COVID-19
[?] Tu Youyou had always take the needs of the country as her own responsibility, as the goal of life all the time	Tu Youyou, who is nearly 90 years old, continues to preside artemisinin scientific research to creat new achievement s for the benefit of human health.	Overview of Extraction	Continue to persist extraction of artemisinin

1) **Preview design:** preview is an important part of teaching activities. Before class, the preview courseware was released in advance, the preview content, teaching objectives and requirements of this class were sent to students. Before class, the relevant literature of artemisinin extraction was consulted, and some exercises and interaction was designed, students can submit online before class, so that teachers can understand the preview situation of students in advance, so as to have a definite target in class.

2) **Classroom teaching design:** Classroom teaching adopts the form of "objective –introduction-concept / principle / knowledge - (artemisinin extraction as an example) case -application -summary". Combining the case with the teaching content, the course mode is open and discussion type. Students discuss problems in groups through literature review before class to find specific questions; at the same time, for the unit operation that students can easily accept and understand, students were required to design more than three kinds of technological process, and draw the process flowchart with equipment shape, by comparison and analysis, selection of suitable technological process, which makes the technology feasible, economic feasible and environmental protection feasible. To observe the design of industrial separation process from this scale will help to strengthen the overall concept and awareness that engineering students must have. At the same time, Tu youyou successfully extracted artemisinin after 191 experiments, organically integrated the ideological and political education content with the professional education content, strengthened the students' patriotism sentiment education, the cultivation of noble professional ethics, the construction of harmonious interpersonal relationship, the diligence, perseverance and perseverance of scientific research and exploration spirit.

3) **Design of homework and study question after class:** The design of homework and study question after class can make students grasp knowledge more firmly and flexibly. At the same time, the ideological and political education content should be organically integrated with the professional education content to strengthen the education of students' patriotism, the cultivation of noble professional ethics, the construction of harmonious interpersonal relationship, and the spirit of hard work, perseverance and perseverance in scientific research and exploration[5-8].

Some designed Study Question as an example:

① Tu Youyou successfully extracted artemisinin after 191 experiments; It was a long and arduous process. What tribulations do these processes suffer?

② What was the main reason of the successful development of artemisining?

③ What is the most important significance of successful development of artemisinin?

④ What is the relationship of the successful research and development of artemisinin with TCM and modern medicine?

⑤ Heroes in white stuck to the front line of Wuhan and charged forward for the victory of the fight against COVID-19. What did you learn from this?

⑥ What have you learned from the anti-epidemic deeds of medical scientists?

⑦ Under the COVID-19 epidemic situation, did ideological and political education help you to master the theoretical knowledge of modern separation technology and Medical?

⑧ Under the COVID-19 epidemic situation, did ideological and political education help you to understand the spiritual connotations such as patriotism, self-confidence in TCM, scientific literacy and mutual learning among civilizations?

3. TEACHING EFFECT:

through the study of this course, students can master the characteristics of separation technology and the general process of separation process; master the role of modern separation technology, separation principle and classification, as well as the progress of modern separation technology, so that students can use the basic theory, basic principle and basic process of main separation technology involved in engineering, combined with the needs of proposed projects, possible plans or design targets were proposed. At the same time, combined with the ideological and political education, tells students that adversity gives people valuable opportunities for tempering. Only those who can stand the test of environment can be regarded as the real strong.

4. TEACHING RETHINK PROFOUNDLY:

Ideological and political education by case teaching in modern separation technology under the COVID-19 epidemic can guide students to get out of misunderstanding and establish correct values and judgment. Through the ways to look up the material, independent thinking, participation in discussion, present their opinion, ask teachers for help and report writing, self-motivated learning, cooperative learning and inquiry learning are embodied to realize self-education and self-improvement. The difficulty of case teaching is far more than that of general classroom teaching, which puts forward higher requirements for teachers to con-

trol classroom ability. Teachers need to continue learning, continuous improvement, and constantly improve their own observation and judgment ability, speech expression ability, comprehensive analysis ability, teaching research ability and comprehensive-knowledge application ability. The higher education should not only educate the talented persons, but more importantly foster the spirit and morality of students by XI Jinping thought on socialism with Chinese characteristics for a New Era. We should have a wide sphere of vision, the lofty realm and a more scientific thinking, to constantly improve our teaching level.

5. CONCLUSION:

as a university teacher, during the epidemic period, it is the duty to combine online professional teaching based on rain classroom with ideological and political courses, impart professional knowledge, spread positive social energy, stimulate college students' professional cognition, enhance their cultural self-confidence, cultivate their patriotic feelings and stimulate their social responsibility! Taking advantage of the special period and situation of major epidemic situation, taking ideological and political course as the starting point, on the basis of teaching content and subject knowledge, the touching deeds in epidemic prevention and control are turned into "live teaching materials" in education and teaching. The spirit of unity, dedication and scientific spirit are organically integrated into the curriculum education and teaching, so as to improve the effectiveness of Ideological and political education of the curriculum. We should guide the young students with rich and colorful forms, cultivate them by casting their soul, and construct correct world view, outlook on life and values.

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Conflict Of Interest: The authors declare no conflict of interest.

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